

## SRI VENKATESWARA COLLEGE OF ENGINEERING (AUTONOMOUS)

## COURSE DELIVERY PLAN - LAB

Department of Biotechnology LP: BT18412

B.E/B.Tech/M.E/M.Tech: Biotechnology Regulation: 2018A

\_\_\_\_\_ Rev. No: 01

Date: 07/02/2023

PG Specialisation :-NA-

Sub. Code / Sub. Name : BT 18412/Cell Biology Laboratory

Session No*	List of Experiments		
CYCLE-I			
1	Introduction to principles of sterile techniques and cell propagation		
2	Principles of microscopy, phase contrast and fluorescent microscopy		
3	Identification of given plant, animal and bacterial cells and their components by microscopy		
4	Gram's Staining - To differentiate gram positive and gram negative bacteria.		
5	Leishman Staining – To differentiate nucleated and non-nucleated blood cells.		
6	Giemsa Staining – To stain blood parasites.		
9 9	CYCLE-II		
7	Thin Layer Chromatography – Isolation of chlorophyll pigments.		
8	Separation of Peripheral Blood Mononuclear Cells from blood		
9	Osmosis and Tonicity		
10	Trypan Blue Assay – To differentiate live and dead cells.		
	Staining for different stages of mitosis in Allium Cepa (Onion)		

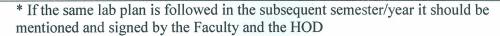
Content beyond syllabus (if any):

The structural difference between various micro organisms will be learnt through simple staining along with the identification of motile nature of microorganisms.

## **REFERENCE BOOKS:**

- 1. Rickwood, D. & Harris, J.R., "Cell Biology: Essential Techniques", John wiley Publishers, 1996.
- 2. Davis, J.M. "Basic Cell Culture: A Practical Approach", IRL, 1994.
- 3. Roitt I., Brostoff J. and Male D. "Immunology", 6 th edition, Mosby, 2001.

	Prepared by	Approved by
Signature	5.0	dri-t
Name	Mr. S. Naga Vignesh	Prof. E. Nakkeeran
Designation	Assistant Professor	Professor & HOD
Date	07/02/2023	07/02/2023
Remarks*: This 1	esson plan will be followed in the subseque	ent years





<sup>\*</sup> Session Duration: 200 minutes